

IN THE ABSTRACT

In response to the objection to the Abstract, the Abstract of this application is set forth as follows in a single paragraph on a separate sheet.

ABSTRACT

~~The present invention relates to a~~ A magnesium titanate oxide film implant ~~for insertion into a living body, utilized in medical fields such as dentistry, orthopedic surgery, maxillofacial surgery and plastic surgery, and a method for preparing the same. The magnesium titanate oxide film implant in accordance with the present invention is prepared by forming a titanium oxide film (a magnesium titanate oxide film) in which magnesium is incorporated into the surface of titanium or a titanium alloy. A process for preparing a magnesium titanate oxide film implant in accordance with the present invention comprises~~ is prepared by irradiating UV light on an implant body made of titanium or a titanium alloy in distilled water ~~for more than 2 hours;~~, dipping the UV light-irradiated implant body in an electrolyte solution containing magnesium~~[[;]]~~, and coating a magnesium titanate oxide film on the dipped implant body by anodic oxidation ~~at a voltage of 60 to 500 V~~. Therefore, the present invention can provide an implant having increased bioactivity of a titanium oxide film formed by anodic oxidation, and provides an optimum magnesium titanate oxide ($Ti_xMg_yO_z$) thickness for successful osseointegration of the magnesium titanate ($Ti_xMg_yO_z$) implant.